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## NOTICE OF ALLOWANCE AND FEE(S) DUE

DATE MAILED: 02/27/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786.237	02/23/2004	Richard K. Staub	1742US01	9171

TITLE OF INVENTION: DELIVERY HEAD FOR MULTIPLE PHASE TREATMENT COMPOSITION, VESSEL INCLUDING A DELIVERY HEAD, AND METHOD FOR TREATING A VESSEL INTERIOR SURFACE

APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	05/27/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used to correspondence including d below or directed off tions.	for transmitting the I ng the Patent, advanc nerwise in Block 1, b	SSUE FEE and PUBLIC e orders and notification by (a) specifying a new or	of m	ON FEE (if requirements of the contract of the	red). I ill be and/or	Blocks 1 through 5 st mailed to the current (b) indicating a sepa	nould be completed where correspondence address as rate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
43896 7590 0227/2008 ECOLAB INC. MAIL STOP ESC-F7, 655 LONE OAK DRIVE EAGAN, MN 55121				Lber	Cert	ificate	of Mailing or Trans	nission deposited with the United t class mail in an envelope above, or being facsimile ate indicated below.
								(Depositor's name)
								(Signature)
								(Date)
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10/786,237	02/23/2004		Richard K. Staub				1742US01	9171
TITLE OF INVENTION AND METHOD FOR TE			ASE TREATMENT COM	IPOS	SITION, VESSEL	INCL	JDING A DELIVER	HEAD,
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE D	UE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300		\$0		\$1740	05/27/2008
EXAM	INER	ART UNIT	CLASS-SUBCLASS					
WEBB, GR		1796	134-022100	_				
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required.	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach	inge of Correspondence "Indication form need. Use of a Custom	or agents OR, alter	native ingle or a attor	3 registered patent vely, e firm (having as a gent) and the name meys or agents. If r printed,	attorn	ar a 2	
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4a. The following fee(s) a	are submitted:		4b. Payment of Fee(s): ( A check is enclos Payment by credi	Pleas ed. t care	d. Form PTO-2038	is atta	ched.	
	s SMALL ENTITY state	as. See 37 CFR 1.27.					TTY status. Sec 37 CF	
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if req records of the United Sta	uired) will not be acce tes Patent and Traden	epted from anyone other the nark Office.	nan th	he applicant; a regis	stered a	ttorney or agent; or th	e assignee or other party in
Authorized Signature					Date			
Typed or printed name					Registration N	o		
This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C itality is governed by 35 I application form to the ons for reducing this bu irginia 22313-1450. DO 13-1450.	EFR 1.311. The inform U.S.C. 122 and 37 C USPTO. Time will r rden, should be sent t O NOT SEND FEES O	nation is required to obtain FR 1.14. This collection i vary depending upon the i o the Chief Information O DR COMPLETED FORM	or re s esti indivi iffice S TC	etain a benefit by the imated to take 12 n idual case. Any con r, U.S. Patent and D'THIS ADDRESS.	ne publ ninutes mment Fraden . SENI	ic which is to file (and to complete, includin s on the amount of tir ark Office, U.S. Deps O TO: Commissioner t	by the USPTO to process) g gathering, preparing, and ne you require to complete utment of Commerce, P.O. for Patents, P.O. Box 1450,

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43896	7590 02/27	08	EXAM	IINER
ECOLAB INC.			WEBB, GI	REGORY E
MAIL STOP ESC-F7, 655 LONE OAK DRIVE			ART UNIT PAPER NUMBER	
EAGAN, MN 55121			1796	

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 361 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 361 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Notice of Allowability

Application No.	Applicant(s)	
10/786,237	STAUB ET AL.	
Examiner	Art Unit	
Gregory F. Webb	1796	

The MAILING DATE of this communication appears of All claims being allowable, PROSECUTION ON THE MERITS IS (OR herewith (or previously mailed), a Notice of Allowance (PTOL-85) or of NOTICE OF ALLOWABLITY IS NOT A GRANT OF PATENT RIGHT. of the Office or upon petition by the applicant. See 37 CFR 1.313 and 10 cross the property of the Office or upon petition by the applicant.	REMAINS) CLOSED in this application. If not included ner appropriate communication will be mailed in due course. THIS 5. This application is subject to withdrawal from issue at the initiati
1. This communication is responsive to <u>arguments submitted 11/23</u>	<u>%07</u> .
<ol> <li>The allowed claim(s) is/are <u>8-19 and 21-24</u>.</li> </ol>	
3.  ☐ Acknowledgment is made of a claim for foreign priority under 3 a) ☐ All b) ☐ Some* c) ☐ None of the: 1.  ☐ Certified copies of the priority documents have been 2.  ☐ Certified copies of the priority documents have been 3.  ☐ Copies of the certified copies of the priority document International Bureau (PCT Rule 17.2(a)). * Certified copies not received:  Applicant has THREE MONTHE SROM THE "MAILING DATE" of this noted below. Failure to timely comply will result in ABANDONMENT. THIS THREE-MONTHE PRIOD IS NOT EXTENDABLE.	received.  received in Application No  Its have been received in this national stage application from the
A SUBSTITUTE OATH OR DECLARATION must be submitted. INFORMAL PATENT APPLICATION (PTO-152) which gives rea	
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be s  (a) ☐ including changes required by the Notice of Draftsperson's f  1) ☐ hereto or 2) ☐ to Paper No./Mail Date,  (b) ☐ including changes required by the attached Examiner's Ame Paper No./Mail Date,  Identifying indicia such as the application number (see 37 CFR 1.84(c)) each sheet. Replacement sheet(s) should be labeled as such in the her  6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of attached Examiner's comment regarding REQUIREMENT FOR:	Patent Drawing Review ( PTO-948) attached  Indiment / Comment or in the Office action of  should be written on the drawings in the front (not the back) of deer according to 37 OFR 1.121(d).  BIOLOGICAL MATERIAL must be submitted. Note the
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)	5. Notice of Informal Patent Application
Notice of Preferences Cited (1 TO-932)     Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ☐ Interview Summary (PTO-413),
<ol> <li>Information Disclosure Statements (PTO/SB/08),</li> </ol>	Paper No./Mail Date 7. Examiner's Amendment/Comment
Paper No./Mail Date	8.  Examiner's Statement of Reasons for Allowance 9.  Other
	/Gregory E. Webb/ Primary Examiner, Art Unit 1796

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Art Unit: 1796

### REASONS FOR ALLOWANCE

1. Claims 8-19, and 21-24 are allowed.

2. The following is an examiner's statement of reasons for allowance: The examiner agrees with those arguments presented by applicant. In particular the applicant now requires that the vessel contain a delivery head that has a capacity for flow rates in the claimed conditions of gas and liquid pressures in this specific volumetric ratio.
Furthermore, the requirement that the vessel create specific back pressures was also not found in the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory E. Webb whose telephone number is 571-272-1325. The examiner can normally be reached on 9:00-17:30 (m-f).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Application/Control Number: 10/786,237

Art Unit: 1796

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gregory E. Webb/ Primary Examiner, Art Unit 1796 Gregory E. Webb Primary Examiner Art Unit 1796

/G. E. W./ Primary Examiner, Art Unit 1796